Richard and Peggy Bauhaus
3800 Shadowhill Drive, Santa Rosa, California 95404

February 15, 1975

Dr. Joshua Lederberg
Department of Genetics
Stanford University
Stanford, California

Dear Dr. Lederberg,

We are writing to you in response to seeing your name, along with other eminent scientists, on a statement about the energy crisis. This statement encourages use of coal and uranium as solutions to our serious energy problems. We write as Stanford graduates, feeling that we have that background in common with you.

We have begun to take a serious interest in the benefits and hazards of nuclear power plants, and have done research into this subject. We are writing to ask you to clarify what seems to us to be a conflict in your stance toward genetic effects of radiation. Only as people like us are really informed as to <u>facts</u> will we be able to make intelligent decisions.

Here are our questions:
In Gofman and Tamplin's book, <u>Poisoned Power</u> (obviously an anti-nuclear power book) you are quoted as their authority on genetic problems caused by radiation; to quote two:

> "The Nobel Laureate in Genetics, Professor Joshua Lederberg, recently indicated his grave concern about the implications of increasing the existing mutation rate of our genes, and stated that present radiation standards allow for a 10 percent increase in mutation rate. And he says, 'I believe that the present standards for population exposure to radiation should and will (at least de facto) be made more stringent, to about one percent of the spontaneous rate, and that this is also a reasonable standard for the maximum tolerable mutagenic (heredity) effect of any environmental chemical.'" (p. 76)

> "Professor Lederberg has recently stated the following: We can calculate that at least 25 percent of our health care burden is of genetic origin. This figure is a very conservative estimate in view of the genetic component of such griefs as schizophrenia, diabetes, and atherosclerosis, mental retardation, early senility, and many congenital malformations." p. 85)

In this book the authors say that <u>any</u> amount of radiation, natural or otherwise, causes increase in mutation rate or genetic effect, and that the standards set for radiation of .17 rads are much too high.

1. Have you changed your view of the effects of radiation in present and future generations because of further research since 1970 (date of book)?

2. Is it true or not true that <u>any</u> amount of radiation over zero has harmful effects?

3. Is the figure of .17 rads set too high?

4. Do you really believe that benefits of nuclear power offset the risk of genetic damage?

5. Do scientists know enough about radiation effects to proceed with the nuclear program?

If at all possible we would appreciate a reply to our concern, realizing of course that you are a busy man. We have two boys who will inherit the consequences of whatever is done now, and we want to be able to make the right decisions for them and for the future.

Sincerely,

Peggy Burhans

Richard Burhans